

Pollution Prevention and You

In New Jersey, New York, Puerto Rico, and the U.S. Virgin Islands

Region 2 Pollution Prevention Program













Prevenção da poluição e você

Bem-vindo

In New Jersey, New York, Puerto Rico, and the U.S. Virgin Islands

Region 2 Pollution Prevention Program









Pollution Prevention Act of 1990

- Established prevention as the first priority for addressing pollution and waste.
- Set up guiding principles:
 - Reduce potential sources of pollution and waste before they occur.
 - Integrate P2 activities into all aspects and sectors of society.
 - Ensure P2 is also cost effective.





Pollution Prevention (P2)

- Reducing or eliminating waste at the source.
- Modifying production processes.
- Using non-toxic or less toxic substances.
- Implementing conservation techniques and best management practices.
- Maximizing reuse of process materials (or byproducts).





Region 2 Pollution Prevention Office

- Promotes P2 approaches by providing:
 - Direct technical assistance
 - Economic assistance
 - States
 - Local governments
 - Nonprofits
 - Academia
 - Outreach and education





P2 Resources

- EPA P2 Program www.epa.gov/p2
- EPA Region 2 P2
 www.epa.gov/region02/p2





P2 and Energy Efficiency

- Reduces the amount of fuel required to produce energy.
- Reduces related emissions of pollutants and greenhouse gases.
- Can reduce energy costs by 30 to 50 percent.
- Energy-efficient products and clean energy alternatives are key to P2.





ENERGY STAR®

An ENERGY STAR label:

- Ensures product meets strict EPA energy efficiency guidelines.
- Indicates products use up to 90 percent less energy than standard models.
- Can be found on more than 40,000 products across 50 different product categories.







ENERGY Star New Homes

- At least 15 percent more energy-efficient than homes built to the 2004 International Residential Code.
- Include a variety of "tried and true" energy efficient features that result in improved home quality and homeowner comfort, lower energy demand, and reduced air pollution.





ENERGY Star Building and Plants

- Strategic energy management across an entire organization.
- Provides strategies, tools, professional assistance and recognition opportunities.





ENERGY STAR Successes

 In 2006 alone, Americans—with the help of ENERGY STAR—saved enough energy to avoid greenhouse gas emissions equivalent to emissions from 25 million cars, while simultaneously saving \$14 billion on their utility bills.





"Change a Light" Campaign Benefits

 If every American household took the pledge, they would save enough energy to light more than 3 million homes for a year equating to more than \$600 million in annual energy costs and prevent greenhouse gases equivalent to the emissions of more than 800,000 cars.







P2 and Clean Energy

- Includes environmentally friendly, nonpolluting forms of energy, typically renewable.
- Reduces emissions of air pollution and greenhouse gases.
- Lowers consumer energy bills.





Clean Energy Partnerships*

- 79 Green Power Partners
- 17 Combined Heat and Power Partners





*Partners located in EPA Region 2 at the end of 2007.





Energy Resources

- ENERGY STAR www.energystar.gov
- ENERGY STAR "Change a Light Campaign" www.energystar.gov/index.cfm?fuseaction=cal.show Pledge
- EPA's Clean Energy Programs www.epa.gov/cleanenergy





P2 and Water Efficiency

- Helps conserve natural resources and reduce water consumption and costs.
- Thirty-six states expect local or regional water shortages over the next several years.





WaterSense®

- WaterSense aims to protect our water supply by promoting efficiency.
- WaterSense labeled products are 20 percent more water-efficient than others.







WaterSense Benefits

- If all U.S. households installed water-efficient appliances, the country would save more than 3 trillion gallons of water and more than \$18 billion dollars per year.
- If every household in Region 2 alone installed WaterSense labeled faucets only, it would save more than 18 million gallons every day.





WaterSense Resources

• www.epa.gov/watersense





P2 and Green Chemistry/Engineering

- Green Chemistry
 - Environmentally friendly chemicals and processes
 - Result in reduced waste; eliminating costly treatment; safer products; and reduced use of energy and resources
- Green Engineering
 - Processes and products that minimize pollution at the source and reduce risk to human health and the environment





EPA's Green Chemistry Program

 Promotes the research, development, and implementation of innovative chemical technologies that accomplish P2 in a scientifically sound and cost-effective manner.







EPA's Green Engineering Program

 Strives to incorporate risk-related concepts into chemical processes and products designed by academia and industry.









Green Chemistry Successes

- Through 2006, all technologies nominated for the Presidential Green Chemistry Challenge Awards collectively:
 - Eliminate the use or generation of 1.2 billion pounds of hazardous chemicals and solvents each year.
 - Save more than 16 billion gallons of water each.
 - Eliminate 57 million pounds of carbon dioxide emissions each year.





Green Chemistry/Engineering Resources

- Green Chemistry <u>www.epa.gov/greenchemistry</u>
- Green Engineering www.epa.gov/oppt/greenengineering
- Environmental Stewardship
 www.epa.gov/innovation/stewardship/index.htm
- EPA Region 2: Green Chemistry and Green Engineering in the Pharmaceutical Industry www.epa.gov/region02/p2/green-pharmaceutical.html





P2 and the Hospitality Industry

- Combines economically and environmentally sustainable practices.
- Wide array of services and activities:
 - Water and energy efficiency
 - Waste reduction
 - Chemical usage
 - Environmentally preferable material procurement





EPA Region 2 and Hospitality Industry

- Established a regional hospitality workgroup.
- Exploring P2 opportunities in hospitality facilities in upstate New York.
- Focusing on improving the hospitality infrastructure in Puerto Rico.





Hospitality Resources

www.epa.gov/region02/p2





P2 and EPP

Environmentally preferable purchasing (EPP)
considers environmental impact along with
price, performance, and other traditional
factors when buying products and services.





EPA's EPP Program

- Helps agencies across the federal government comply with green purchasing requirements.
- Provides product information for federal purchasers, as well as green vendors, businesses, and consumers.





EPP Program Benefits

- Stimulates market demand for green products and services.
- Provides a simple standard to hold your products to when making purchases that could affect the environment.





EPEATTM

- Online tool to help purchasers compare and select electronics based on environmental attributes.
- Contains environmental performance criteria.
- Certifies more than 700 electronic products.







EPEAT Successes

- In the first six months of 2006, the use of EPEAT-regulated products prevented:
 - The release of 56.5 million metric tons of air pollution.
 - 118,000 metric tons of water pollution.
 - The disposal of 41,100 metric tons of hazardous waste.





EPP Resources

- EPA's Environmentally Preferable Purchasing Program www.epa.gov/epp
- EPEATwww.epeat.net





For Additional Information

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EPA Region 2 Pollution Prevention Program www.epa.gov/region02/p2





Obrigado

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